

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

COMPLETE LISTING OF THE CLAIMS:

Claims 1-14 : (Canceled)

Claim 15 : (New) A communications system, comprising:

a) a plurality of interconnected network elements (NE), in which each NE is associated with a unique NE identifier (NEID) value and comprises one or more input ports, and one or more output ports;

b) each input port being provided for inputting from an adjacent one of the plurality of NEs, a synchronization signal and a quality level indication (QLI) for indicating a quality of a source of the synchronization signal, and being associated with a source identifier (SID) value that identifies the input port at which each synchronization signal is input from the said adjacent NE, the SID value of each input port comprising the NEID value of the adjacent NE;

c) each output port of each NE being provided for outputting to an adjacent NE, a selected one of the input synchronization signals and the QLI, and comprising a QLI setting means for setting a value of a QLI output at that output port, based on a comparison of the SID value at that output port with the SID value at the input port of the selected one of the input synchronization signals; and

d) a central management means comprising means for setting the SID value of each port of each NE to the appropriate NEID value.

Claim 16 : (New) The system as claimed in claim 15, in which each NE comprises sending means for sending its own NEID value to each NE to which it is directly connected.

Claim 17 : (New) The system as claimed in claim 16, wherein the sending means is arranged to repeatedly send the NEID value.

Claim 18 : (New) A method of indicating a quality level of synchronization signals in a communications system comprising a plurality of interconnected network elements (NE), each NE comprising one or more input ports and one or more output ports, the method comprising the steps of:

- a) receiving at the input port of each NE, a synchronization signal and a quality level indication (QLI) for indicating a quality of a source of the synchronization signal from an adjacent one of the plurality of NEs;
- b) allocating to each NE a unique NE identifier (NEID) value;
- c) allocating to each input port of an NE a source identifier (SID) value for identifying the input port at which each synchronization signal is input;
- d) sending at an output port of each NE a selected one of the input synchronization signals and the QLI to an adjacent NE;
- e) receiving synchronization signals at the one or more input ports of each NE;
- f) associating each received synchronization signal with the SID value of the input port at which it is input;

g) selecting for each NE one of the received synchronization signals for output from the one or more output ports of that NE;

h) comparing the SID value associated with the selected synchronization signal with the SID value associated with each output port at which that synchronization signal is output, and setting a QLI output at each output port according to a result of the comparison;

i) setting the SID value of each input port to the NEID value of the NE to which that input port is directly connected; and

j) operating a central management means to associate each input port with the appropriate NEID value.

Claim 19 : (New) The method as claimed in claim 18, including the step of each NE sending its own NEID value to each NE to which it is directly connected.

Claim 20 : (New) The method as claimed in claim 19, including the step of each NE repeatedly sending the NEID value.